

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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In the Matter of)

Closed Captioning and Video)

Description of Video Programming)

MM Docket No. 95-176

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COMMENTS OF NATIONAL BROADCASTING COMPANY, INC.

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March 15, 1996

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SUMMARY

All the programming on the NBC Television Network is currently closed captioned, with the exception of three regularly scheduled programs. Eight of NBC's nine owned television stations caption their local news. NBC's wholly-owned basic cable network, CNBC, captions over 47 hours of programming per week.

The cost of captioning varies depending on the nature of the programming, the volume of the captioning commitment and whether the captioning is done "off line" or in "real time." The current cost of captioning NBC Network programs ranges from a low of \$375/hour to a high of \$1800/hour. Real time captioning of local news on NBC owned stations costs about \$200,000/year, and the captioning of CNBC's prime time programming costs about \$500/hour. In terms of captioning hardware, the current cost of a fully installed captioning encoder is approximately \$10,000.

NBC will save a detailed discussion of the issues surrounding implementation of the mandatory captioning requirements of the Telecommunications Act of 1996 for the rulemaking phase of this proceeding. However, we have the following initial views:

- Mandatory captioning requirements for local television stations and cable programming should be phased in slowly so as to allow the marketplace to adjust and respond to the increased demand for captioning services.
- Local stations and cable networks should have the discretion to choose the methodology by which they caption their programs.
- Program producers should have the responsibility for captioning new programs.

- Captioning should only be required for “previously published” programs that were initially exhibited on a national broadcast or cable network or were captioned for the initial exhibition. The responsibility for captioning “previously published” programming should in all cases rest with the subsequent provider or distributor of the program (e.g., the syndicator).
- Certain categories of programming should be exempt from captioning requirements, including at a minimum regional sports broadcasts, locally originated sports, news services, advertisements, promotional spots and video services available on line.

NBC does not accompany any of its programming with video descriptions. Given current production and transmission technology, DVS would be prohibitively expensive and logistically onerous. NBC urges the Commission to defer any consideration of DVS until digital technology is implemented.

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COMMENTS OF NATIONAL BROADCASTING COMPANY, INC.

National Broadcasting Company, Inc. (NBC) files these Comments in response to the Notice of Inquiry and Further Notice of Inquiry in the above-referenced proceeding, which fulfill the Commission's obligation under Section 713 of the Telecommunications Act of 1996 to obtain information and report to Congress on the closed captioning and video description of video programming. The Notices pose a number of questions about the current status of captioning and the implementation of the new mandatory captioning requirements of the 1996 Act. In these Comments, NBC will provide the Commission with as much information as possible on the current status of captioning of programming on the NBC Television Network, NBC owned television stations and NBC wholly-owned cable networks. We will also provide some preliminary views on the implementation of mandatory captioning, reserving more detailed comments on these issues for the rulemaking phase of this proceeding.

I. AVAILABILITY OF CLOSED CAPTIONING OF PROGRAMMING PROVIDED BY THE NBC TELEVISION NETWORK, NBC OWNED AND OPERATED STATIONS AND NBC WHOLLY-OWNED CABLE NETWORKS

A. The NBC Television Network

The NBC Television Network does not create its own captioning. Rather, it uses four different captioning services located in Boston, MA, Vienna, VA, Van Nuys, CA and Pittsburgh, PA. The captioning methodology these services use for network programming varies according to the type of program involved.

Programs that are on tape or film are captioned "off line." The captioning service gets an advance copy of the script or a tape of the program. Under this method, the captioning material is then sent to a post production company or to NBC, either on a computer disk or via modem. The captioning is encoded by the post production company or by NBC into line 21 of the vertical blanking interval of the NBC Master Tape used for broadcast. Occasionally, there is not enough time for the program to be encoded before broadcast, and the captions are transmitted by "live display" into the Network broadcast signal transmitted from New York.

Live network programs -- mainly news, sports and some late night programs -- are typically "steno captioned." Here the captioner's computer is linked to NBC's Broadcast Operations Center via modem and the captioning material is created for broadcast in "real time." To the extent news or sports programs are scripted by teleprompter or computer (e.g., anchor's remarks or pre-taped pieces), the steno captioner can download these scripts from NBC's system

into his or her computer in advance of the broadcast, and then make the changes necessary in real time if the live dialogue varies from the script. Breaking news and interviews are always steno captioned in real time, and a captioner is on call to the NBC Network from 4 AM to midnight daily in case the Network's regular programming is interrupted for a major breaking news event.

All but three regularly scheduled programs furnished by the NBC Television Network on a national basis are closed captioned. Each week NBC's captioned programming includes all 22 hours of prime time (series, news magazines, movies, mini series and specials), 20 hours of regularly scheduled news programming (SUNRISE, TODAY, NIGHTLY NEWS, WEEKEND TODAY and MEET THE PRESS), 10 hours of daytime programming, 2 ½ hours of Saturday morning children's programs, 13 ½ hours of late night programming and the 4 to 12 hours of NBC Sports weekend programming broadcast over the entire national network. This totals a minimum of 72 to 80 hours of captioned programming per week, or 3,750 to 4,150 hours per year. NBC has provided this level of captioning for approximately three years.

The only nationally broadcast NBC Network programs that are not captioned are (1) LEEZA, a daytime talk program, and (2) REAL LIFE, a brand new magazine effort, which premiered on March 4, 1996, and (3) FRIDAY NIGHT, a music program aired at 12:35 AM, which features many popular music videos that are already captioned, but other material which is not.

Regional sports programming on the Network, including 4 to 10 regional football or

basketball games which may be aired simultaneously on different NBC affiliates on Saturdays and Sundays, is not captioned due to the technical complications of captioning multiple feeds at the same time. (See p. 14, infra).

Many commercials scheduled in and adjacent to Network programs are captioned by the relevant advertising agency. Network promos are not captioned. Every day NBC produces approximately 75 - 100 of these promo spots, which are usually 10 or 20 seconds in length, and usually broadcast within 24 hours of production. Because of the topical nature of some NBC programs (e.g., news magazines), some promos are produced literally a few hours before air. Captioning so many spots in the available time would be a logistical nightmare. In any event, information about the name of the program and the time of the upcoming broadcast is often displayed visually by graphics used in the promo.

NBC supplies its affiliated stations with a newsfeed service out of Charlotte, N.C., which is called NBC NewsChannel. The Charlotte operation collects news material from affiliated stations around the country as well as from the NBC News Division. Affiliates can incorporate footage or individual stories into their local news programs and/or carry NBC NewsChannel material between the hours of 2:30 and 8:30 AM EST. NBC NewsChannel may provide as many as 600 different news stories, originating from 125 different sites, to over 200 NBC affiliates. Affiliates typically receive this material only hours before their local newscasts. NBC NewsChannel is not part of the regular NBC Network programming service, and the material in the NewsChannel feed is not captioned.

B. NBC Owned and Operated Stations

Eight of NBC's nine owned television stations caption their local news programs.¹ The owned stations utilize either steno captioning, "electronic newsroom" (or teleprompter) captioning, or a combination of the two methods. In "electronic newsroom" captioning, the captioning material consists of the script as it appears on the studio teleprompter. Unless this methodology is combined with real time steno captioning, cross-talk, live interviews and breaking news included in the broadcast are not captioned. In addition to local news, NBC owned stations carry varying amounts of syndicated programming some of which is closed captioned by the producer or syndicator.

C. NBC Cable Networks

NBC owns and operates two cable programming networks: CNBC and America's Talking.² CNBC, a 24 hour consumer news and business programming service on basic cable, currently steno captions 47 ½ hours of programming each week. America's Talking is a basic cable network that was launched in July, 1994 that currently reaches approximately 17 million subscribers. NBC has announced that America's Talking will be the basis for a 24-hour cable

¹ NBC's owned and operated television stations are: WNBC, New York; WCAU-TV, Philadelphia; WRC-TV, Washington, D.C.; WTVJ-TV, Miami; WMAQ-TV, Chicago; KNBC-TV, Los Angeles; WNCN-TV, Raleigh-Durham; WJAR-TV, Providence; and WCMH-TV, Columbus.

² NBC also holds minority investments in a number of other cable programming services.

news, information and talk service NBC will own jointly with Microsoft, which will roll out some time during the summer, 1996. The programming currently on America's Talking is not captioned.

D. Previously Published Programming

NBC began captioning 4 hours of its prime time schedule in 1980; all of prime time was captioned by 1990. The roll-out of captioning other types of NBC Network programming was as follows: news, 1986; sports, 1987; children's, 1988; daytime, 1989; late night, 1992. Thus, some programs that appeared on NBC prior to the time the relevant daypart was fully captioned will not be captioned when they appear in syndication unless the syndicator has chosen to have the program captioned. The only previously published programming broadcast on the NBC Television Network is theatrical movies, which are captioned along with the rest of prime time. Syndicated off-network programming or syndicated theatricals broadcast by NBC owned stations will carry captions if the program or movie was captioned for its original network broadcast.

NBC Studios captions the programming it produces for the NBC Television Network. Captioning material is not encoded on the Master Production Tape. However, if NBC-produced programs are syndicated to local stations or cable programmers, the distributor or programmer can obtain a copy of the captioning material on disk from the captioning service NBC used for the Network broadcast. If the Network version of a program is altered (e.g., shortened or re-sequenced) for syndication, the captioning material may have to be reformatted by the syndicator.

II. THE COST OF CLOSED CAPTIONING

The cost of captioning is largely driven by manpower requirements. It takes approximately 20-30 person hours to caption an hour of Network series or long-form entertainment programming. In addition, captioning costs vary widely depending on (1) whether the captioning is done "off line" or in "real time," with the former being more expensive; (2) for live programming, whether there is any pre-scripted material for use by the captioner; and (3) the volume of the commitment (a one-time charge for a special project is typically higher than a contract for multiple hours of captioning on a daily basis). NBC and the other major commercial broadcast networks utilize the larger, most experienced captioning agencies, which may charge relatively higher rates, but which provide the best quality captioning and reliability of service.

The typical current cost of captioning an hour of different types of NBC Network programs is listed below:

-	Prime Time Series	\$900-1800
-	Made for TV Movies, Miniseries, Specials	\$1800
-	Prime Time News Programs	\$825
-	Daytime Dramas	\$400
-	Network Sports	\$375-600
-	Late Night Programs	\$390-450
-	News Programs	\$825

- Saturday AM Live Action Children's \$1200

NBC makes significant annual expenditures to caption programming on the NBC Network, NBC owned stations and CNBC. Captioning of prime time network series programming is jointly funded by NBC, the program producers, and occasionally, an advertiser. The cost of captioning other Network programs is defrayed to a significant degree by government grants to captioning agencies, and, to a lesser extent, by program producers or advertisers. Department of Education grants are the major source of funding for non-prime time Network sports broadcasts, daytime dramas and Saturday morning children's programming on the NBC Network. The Department of Education also provides grants that have covered about 2/3 of the cost of captioning NBC's Network news programming, as well as movies, mini-series and specials in prime time.

The steno captioning of NBC owned stations' local news costs approximately \$200,000 a year. In some instances, local advertisers help to defray these costs. There is no appreciable cost associated with the "electronic newsroom" captioning utilized by some of the owned stations.

It is difficult to estimate the cost of captioning the 42 hours of daytime programming that is captioned on CNBC each week because of a special arrangement with the captioning agency that gives it the right to sell billboards in the captioning material on CNBC directly to advertisers in lieu of captioning fees. CNBC's out-of-pocket cost for steno captioning daytime programming is therefore only about \$125/hour. The cost of captioning CNBC prime time programming is

close to \$500/hour, some of which is also defrayed by advertisers.

The hardware for encoding captioning material into line 21 of the Vertical Blanking Interval now costs about \$10,000 installed. NBC has 11 encoders in New York, 10 in Burbank and 2 in Washington. Eight of the NBC owned stations and CNBC also have purchased encoders.

The NBC Network currently utilizes four of the largest and most experienced captioning services, all of which are listed in the December 4, 1995 Notice. The NBC owned stations and CNBC use other experienced captioners. These are the services which have received the bulk of government grants, and which are utilized by NBC and the other major national producers and distributors of video programming. Although captioning has become "cottage industry" across the country, the quality and reliability of many of these smaller and newer operations, where individuals may work out of their homes, is sometimes questionable. The cost of the major national captioning services is higher, but so is the reliability and quality of the captioning. It is important to stress that as a national commercial network with high technical standards and tight programming deadlines, NBC must be certain that its quality and dependability requirements are met.

III. MANDATORY CLOSED CAPTIONING REQUIREMENTS

Section 713 of the Telecommunications Act requires the Commission to adopt regulations to ensure that (1) new video programming will be captioned and (2) the captioning of previously published programming will be maximized. The statute authorizes the Commission to set deadlines for mandatory captioning and to exempt certain programs or services from these requirements if it determines that captioning would be "economically burdensome." The Commission may also grant an exemption to any video provider or producer who demonstrates that captioning would result in an "undue burden."

Although this is only the Inquiry phase of this proceeding, the Commission has asked for comments on some of the issues that must be resolved prior to the adoption of the mandatory requirements and exemptions contemplated by the statute. At this point, NBC will indicate only its broad views on those issues, saving more detailed discussion for the NPRM phase of this proceeding, when we will have the benefit of the information solicited by this Inquiry, and when specific rules have been proposed by the Commission.

1. Mandatory captioning requirements for local television stations and cable programming should be phased-in slowly. If the Commission implements the statutory requirements for mandatory captioning too quickly, it may inadvertently jeopardize the captioning of thousands of hours of broadcast network programming that is now available to deaf and hard of hearing viewers across the entire country. NBC, the other national broadcast networks and

their outside program suppliers need ongoing access to captioning services with superior technology, skilled and seasoned captioners, depth of capacity and a proven track record. There are simply not enough of these experienced captioners or high quality captioning agencies to both continue the level of service currently provided to major producers and national broadcast networks and fulfill an overnight requirement involving all new television programming -- national and local broadcast, cable and satellite delivered. A mandatory requirement for local, syndicated and cable programming must be phased-in over a long enough period to allow the market to adjust and respond to new and increased demand. In particular, the Commission must allow sufficient time adequately to train the number of captioners that will suddenly be needed for hundreds of stations and dozens of cable networks, particularly for real time "steno captioning." Any other approach will dramatically increase the cost for experienced captioners, and/or flood the market with cheaper alternatives at the expense of the quality and reliability of the captioning.

A gradual phase-in of captioning requirements will also allow producers and broadcasters to develop funding mechanisms to support this service. The steady increase in the captioning of broadcast network programming was, in part, the result of government funding directed to different types of programming at different points in time. The same model should be applied to locally-originated broadcast programming. A sensible transition will provide the time necessary to propose, fund and award new government grants to support local station captioning. If, as NBC fears, government funding begins to dry up as a result of the mandatory nature of the captioning requirement, a longer phase-in period will give local stations and cable networks the time necessary to tap alternative sources financial support (i.e., advertisers or charitable institutions),

or to absorb these new costs themselves at a reasonable rate. Since local stations are already looking at enormous costs associated with the conversion to digital transmission and production, the Commission should take care not to impose additional financial burdens too soon or too quickly.

2. Particularly with respect to live broadcasts, local stations and cable services should have the discretion to choose the methodology by which they caption their programs. Stations that want to use the "electronic newsroom" method, which translates material in the teleprompter into captioning, should not be prohibited by regulation from doing so. Requiring "steno captioning" at all local stations would dramatically increase their costs at a time when they are already facing capital expenditures in the millions for the conversion to digital broadcasting. In addition, it is unlikely that there are experienced captioners in every television market available to meet the large new demand that would be created by such a requirement. If the Commission nonetheless determines that a particular captioning method is to be prescribed by regulation, then that requirement should be phased in gradually over time.

3. NBC believes that program producers/owners should have the legal responsibility for captioning new programming that is produced or broadcast for the first time after the effective date of the Commission's mandatory captioning rules. As the House Report relating to the Telecommunications Act indicates, it is clearly most efficient and economical to caption programming at the time it is produced, and the production entity is the best position to caption new video programming.

With respect to "previously published" programming, captioning should only be required if (1) the program was initially exhibited on a national broadcast or cable network or (2) the program was captioned for its original exhibition. In any event, if the Commission imposes a regulatory requirement that "previously published" programming be captioned, the responsibility for ensuring that the subsequent use of the program includes the captioning material should in all cases rest with the entity the Notice describes as the "provider" or distributor of the programming (i.e., the national syndicator, cable network, home video distributor, etc, not the producer). If the initial exhibition of the program included captions, the program producer (or other "owner" of the captioning material) should take whatever steps are necessary to ensure that the captioning material is made available, at reasonable cost and in usable form (i.e., on disk), to the "provider" or distributor. Modifications of the captioning material required to conform to edits or other changes made to the original program should be the responsibility of the provider/distributor.

4. Certain categories of programming should be exempt from captioning requirements because of the cost and complexity of captioning. At a minimum, an exemption should extend to regional sports broadcasts, local sports originated by local television stations, and news services such as NBC NewsChannel. The Commission should also exempt commercial advertisements, program promotions and video services available on-line from mandatory captioning requirements because of the logistical difficulty and expense of captioning this material.

There are several technological and logistical problems associated with captioning the many sporting events presented on a regional basis by NBC Network each weekend. First, the

technical aspects of captioning 4 to 10 multiple feeds across several channels at the same time is highly problematic. Second, captioning services often do not exist in the regions where particular games will be available on television, so there is no way for a steno captioner to "see" the game to caption it in real time. Third, the NBC Network has encoding equipment in New York, Burbank and Washington, D.C., but, in the case of some regional games, the Network may be originated from an uplink at the game site, where no encoding equipment is available. In the case of local sports, the burden of captioning would fall primarily on the local stations that originate these programs, many of which cannot afford the additional costs or have limited access to experienced captioners. Finally, the need for captioning of sports material may be less compelling than with other types of programming. A sports event is essentially visual, and statistical information like the score, time to go, and even the progress of the game (*i.e.*, yards to go) is often indicated in graphics viewable by the entire audience. Many of the same technical and logistical problems would plague any attempt to caption newsfeed services such as NBC NewsChannel.

IV. THE IMPACT OF DIGITAL TELEVISION ON CAPTIONING

The advent of digital television will not have a significant impact on captioning. It is NBC's understanding that a technical group has been working with the Electronics Industry Association to ensure that the Grand Alliance advanced television transmission standard and new digital receivers will accommodate the transmission of captioning, including backwards compatibility of captioning material that was originally intended for analog receivers. Once digital television is introduced, however, the procedure for captioning programming will be the same as

it is in the analog environment. Since captioning is a people-intensive endeavor, and since manpower is its principal cost, digital television will not make the process any easier or cheaper.

V. VIDEO DESCRIPTION

NBC does not accompany any of the programming carried on the NBC Television Network, its owned stations or its cable networks with video descriptions (DVS). Given current production and transmission technology, DVS would be prohibitively expensive and a logistically onerous. First, even assuming network programming could accommodate DVS material, every program would essentially need a second script containing descriptions of the on screen action, as well as additional actors to read the descriptions. PBS, which provides video descriptions for a limited number of its programs, receives its programs from producers at least 6 weeks in advance, giving PBS the time to create DVS material. Broadcast networks, on the other hand, typically receive final tapes of their programs from producers 24-48 hours before air.

Second, the NBC Network is not technically equipped to handle DVS. The Network does not have an available audio channel on which to carry the DVS, nor the equipment or infrastructure to transmit it. The facilities and infrastructure required for DVS would cost the Network at least several million dollars. Only about 40 NBC affiliates have the capacity to process and transmit material in the Second Audio Program (SAP) channel that would be used for DVS, and many of those stations are utilizing their SAP capacity for Spanish language simulcasts and other purposes. The use of SAP for DVS would preclude the use of this capacity for Spanish

language simulcasts. Stations that do not currently have SAP reception and decoding capability would have to spend between \$30,000 and \$100,000 apiece to obtain it.

Unlike captioning, digital technology will provide new opportunities to explore the feasibility of DVS. For example, once the transition to digital is complete, the NBC Network feed will carry four audio channels instead of the three channels currently possible on analog transmissions. Moreover, both programmers (broadcast and cable networks) and distributors (local stations and cable systems) will have to modify their production, transmission and facilities equipment over time to accommodate digital technology, and the incremental cost of adding DVS capability may be far less than it would be in the analog environment. NBC therefore urges the Commission to defer any consideration of DVS until digital technology is implemented at both the national and local levels.

Respectfully submitted,

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